WHAT IS CLAIMED IS:

1. A shear test apparatus for measuring a shear characteristic of a curved panel made by curving a rectangular plate to a circular arc shape in cross-section so that the panel has a pair of curved sides and a pair of flat sides perpendicular to the curved sides, the apparatus comprising:

a frame including a fixed first curved side bearing member and a second curved side bearing member which moves in parallel with the first curved side bearing member, for bearing the pair of curved sides, and first and second flat side bearing members, for bearing the pair of flat sides;

a plurality of pin joints provided at the four corners of the frame so as to allow the frame to deform rhomboidally;

four retaining plates for holding the curved panel to the frame;

a guide mechanism for suppressing movement of the second curved side bearing member in a direction perpendicular to the face of the curved panel; and

an arm extending from the center of the second curved side bearing member in a direction perpendicular to the face of the curved panel and having an external force loading point at the center of shear of the curved panel, so that using the external force loading point the second curved side bearing member is forcibly moved, and a shear characteristic of the curved panel is obtained from the load necessary for this movement.